

**Flood Control Project Maintenance  
Levee Inspections**

**Fall 2011 Levee Maintenance Deficiency Summary Report**

**Overall LMA & Unit Ratings, including DWR Erosion Survey**

***San Joaquin River Basin***

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<b>RD0524</b>	Overall LMA Rating	Total LMA Miles				
<b>Reclamation District No. 0524 Middle Roberts Island</b>	<b>U</b>	<b>6.26</b>				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Vegetation	0.07	0.28	1.19	19.01%		
Trim / Thin Trees	0.77	0.08	1.09	17.41%		
Encroachments	0.24	0.01	0.28	4.47%	0.06	0.12
Animal Control	0.35		0.35	5.59%		
Slope Stability	0.10		0.10	1.60%		
Erosion / Bank Caving	0.22		0.22	3.51%		
Crown Surface / Depressions / Rutting	0.02		0.02	0.32%		
<i>Supplemental</i>						
DWR Erosion Survey	0.02	0.35	1.42	22.68%		
<b>LMA Totals:</b>	<b>1.79</b>	<b>0.72</b>	<b>4.67</b>	<b>74.60%</b>	<b>0.06</b>	<b>0.12</b>

**Flood Control Project Maintenance  
Levee Inspections**  
**LMA District Cover Sheet**  
**Fall 2011 Levee Inspection Results**

**Reclamation District No. 0524 Middle Roberts Island**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			U	

\*\* Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

\*  
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports.

Comments


**Flood Control Project Maintenance  
Levee Inspections**

**Unit Cover Sheet**

**Fall 2011 Levee Inspection Results**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Left	6.26
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			U	
Date of Inspection	4/6/2011 - 4/12/2011		10/26/2011 - 10/26/2011	
DWR Inspector	Richard Willoughby		Richard Willoughby	
Accompanied By	Mario Jaques RD 524		Mario Jaques RD 524	

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

**Comments**

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports  
3310 El Camino Avenue, Suite 200  
Sacramento, CA 95821-9000

**X**

Signature of LMA Representative

Date

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River							Left	6.26	10/26/2011 10/26/2011	Richard Willoughby
LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1	0.22	0.22	Earthen Levee	Crown Surface / Depressions / Rutting	CR	M	Regrade the crown roadway for proper drainage.	37.938890 ° -121.343657 °	37.938890 ° -121.343657 °	3 Y
2	0.36	0.36	Earthen Levee	Encroachments	LS	M	Garbage	37.938338 ° -121.341290 °	37.938338 ° -121.341290 °	15 Y
3	0.38	0.39	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site.	37.938527 ° -121.340887 °	37.938553 ° -121.340778 °	4 Y
4	0.48	0.49	Earthen Levee	Erosion / Bank Caving	WS	W	Schedule repair of erosion site prior to the next inspection.	37.938693 ° -121.339063 °	37.938693 ° -121.338993 °	6 Y
5	0.51	0.52	Earthen Levee	Erosion / Bank Caving	WS	W	Schedule repair of erosion site prior to the next inspection.	37.938682 ° -121.338518 °	37.938657 ° -121.338425 °	7 Y
6	0.53	0.60	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: No significant changes observed on site.09/07/2010: No significant changes observed on site. Some emergent vegetation at the lower and middle slope. Existing revetment is no longer adequately protecting the oversteepened slope. Some of the broken concrete used as revetment has slid, dragging levee materials away from the slope and creating notches.  09/29/2009: Erosion site extends from RM 41.11 to 41.18; existing revetment is no longer adequately protecting the oversteepened slope.2008: Existing concrete slabs were placed as temporary fix; some of the slabs have started to slide, dragging levee materials away from the slope and creating notches; note that a sewage treatment plant is located on the landside of the levee. [2011 Site ID:RD0524U01RM41.15]	37.938895 ° -121.337602 °	37.938895 ° -121.337602 °	79 Y
7	0.63	0.63	Earthen Levee	Slope Stability	WS	M	Repair the levee slope damaged by foot traffic and prevent access where possible.	37.938247 ° -121.336503 °	37.938247 ° -121.336503 °	10
8	0.63	0.64	Earthen Levee	Vegetation	WS	U	Remove the wild growth other than native grasses from the levee slopes.	37.938247 ° -121.336503 °	37.938197 ° -121.336405 °	11 Y
9	0.64	0.64	Earthen Levee	Crown Surface / Depressions / Rutting	CR	M	Regrade the crown roadway for proper drainage.	37.938198 ° -121.336407 °	37.938198 ° -121.336407 °	12 Y
10	0.65	0.66	Earthen Levee	Slope Stability	WS	M	Repair slope instability.	37.938105 ° -121.336288 °	37.938023 ° -121.336173 °	13 Y
11	0.68	0.68	Earthen Levee	Vegetation	WS	U	Remove the wild growth other than native grasses from the levee slopes.	37.937808 ° -121.335913 °	37.937808 ° -121.335913 °	14 Y

**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable      PO : Partially Obstructing      N : Not Inspected, see Inspector Comment      C : Corrected  
M : Minimally Acceptable      CO : Completely Obstructing  
U : Unacceptable      W : Watch/Monitor

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
12	0.77	0.78	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: The site is located immediately upstream of a Railroad bridge. Dense vegetation at the water line interferes the view of erosion. [2011 Site ID:RD0524U01RM41.39]	37.936821 ° -121.334582 °	37.936821 ° -121.334582 °	90 Y
13	0.78	0.78	Earthen Levee	Vegetation	LS	M	Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Dense vegetation at landside toe along fence line.	37.936555 ° -121.334847 °	37.936555 ° -121.334847 °	262 Y
14	0.79	0.79	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.936444 ° -121.334797 °	37.936444 ° -121.334797 °	76 Y
15	0.81	0.81	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site.	37.936217 ° -121.334698 °	37.936217 ° -121.334698 °	16
16	0.91	0.91	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: The erosion site is immediately downstream of the riprap protection. [2011 Site ID:RD0524U01RM41.5]	37.935576 ° -121.333202 °	37.935576 ° -121.333202 °	99 Y
17	0.94	1.02	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.935259 ° -121.332864 °	37.935049 ° -121.331334 °	77 Y
18	1.00	1.01	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away. [2011 Site ID:RD0524U01RM41.59]	37.935326 ° -121.331537 °	37.935326 ° -121.331537 °	1 Y
19	1.03	1.03	Earthen Levee	Erosion / Bank Caving	WS	M	Schedule repair of erosion site prior to the next inspection.	37.935018 ° -121.331248 °	37.935098 ° -121.331645 °	17 Y
20	1.09	1.09	Earthen Levee	Slope Stability	LS	M	Repair slope instability.	37.934645 ° -121.330310 °	37.934645 ° -121.330310 °	18 Y
21	1.14	1.17	Earthen Levee	Trim / Thin Trees	WS	M	Trim trees to at least five feet above ground level.	37.934118 ° -121.329657 °	37.933775 ° -121.329305 °	19 Y

**\* Location**

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WS : Water Side  
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CO : Completely Obstructing  
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C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
22	1.16	1.24	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: No significant changes observed on site. 9/07/2010: No significant changes observed on site. Some emergent vegetation at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank. 9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe. 10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2011 Site ID: RD0524U01RM41.79]	37.933347 ° -121.329110 °	37.933347 ° -121.329110 °	2 Y
23	1.17	1.25	Earthen Levee	Vegetation	LS	W	Remove the wild growth other than native grasses from the levee slopes.	37.933775 ° -121.329250 °	37.932784 ° -121.328765 °	915 Y
24	1.25	1.25	Earthen Levee	Encroachments	LS	C	Garbage	37.932665 ° -121.328808 °	37.932665 ° -121.328808 °	20
25	1.26	1.26	Earthen Levee	Encroachments	LS	CO	Ramp Inspector Comments: Unauthorized ramps on landside slope.	37.932533 ° -121.328650 °	37.932533 ° -121.328650 °	263 Y
26	1.31	1.31	Earthen Levee	Encroachments	WS	M	Pipe Inspector Comments: Pipe is not in use and needs to be properly abandoned.	37.931948 ° -121.328387 °	37.931948 ° -121.328387 °	33 Y
27	1.32	1.33	Earthen Levee	Erosion / Bank Caving	WS	M	Schedule repair of erosion site prior to the next inspection.	37.931858 ° -121.328308 °	37.931692 ° -121.328282 °	21 Y
28	1.41	1.42	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site.	37.930575 ° -121.328098 °	37.930420 ° -121.328245 °	22
29	1.51	1.51	Earthen Levee	Trim / Thin Trees	LS	U	Trim and thin trees to allow visibility of the ground and room to flood fight.	37.929118 ° -121.328368 °	37.929118 ° -121.328368 °	916 Y
30	1.56	1.74	Earthen Levee	Vegetation	LS	U	Remove the wild growth other than native grasses from the levee slopes.	37.928352 ° -121.328307 °	37.926497 ° -121.326248 °	23 Y

<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
31	1.58	1.64	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: No significant changes observed on site. Trees concerned still in place. 09/07/2010: No significant changes observed on site. The concern here is the undermining of the levee toe where most of trees are. There are erosion pockets lined along the lower slope and at the base of the trees, exposing tree roots. There is minimal slope protection. 09/29/2009: The lower slope is lined with minor erosion pockets; some tree roots are exposed; there is visible undermining of the levee toe; site is immediately upstream of the Highway 4 Bridge; the bridge is possibly causing a scour to occur, eroding the bank. [2011 Site ID:RD0524U01RM42.2]	37.927770 ° -121.327870 °	37.927770 ° -121.327870 °	5 Y
32	1.62	1.63	Earthen Levee	Vegetation	LS	U	Remove the wild growth other than native grasses from the levee slopes.	37.927635 ° -121.327812 °	37.927540 ° -121.327648 °	24 Y
33	1.62	1.63	Earthen Levee	Vegetation	WS	U	Remove the wild growth other than native grasses from the levee slopes.	37.927635 ° -121.327812 °	37.927540 ° -121.327648 °	25 Y
34	1.63	1.66	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site.	37.927507 ° -121.327593 °	37.927295 ° -121.327298 °	26
35	1.64	1.64	Earthen Levee	Encroachments	WS	CO	Poles Inspector Comments: Landowner constructed boat dock without permit.	37.927372 ° -121.327278 °	37.927372 ° -121.327278 °	39 Y
36	1.66	1.70	Earthen Levee	Trim / Thin Trees	WS	N	Tree stumps. Inspector Comments: Several tree stumps on waterside shoulder.	37.927255 ° -121.327137 °	37.926855 ° -121.326672 °	8
37	1.69	1.69	Earthen Levee	Encroachments	WS	M	Stairways Inspector Comments: Stairs and retaining wall	37.927018 ° -121.326872 °	37.927018 ° -121.326872 °	45 Y
38	1.71	1.73	Earthen Levee	Slope Stability	WS	M	Repair slope instability.	37.926728 ° -121.326597 °	37.926730 ° -121.326508 °	27
39	1.75	1.75	Earthen Levee	Encroachments	LS	U	Garbage	37.926322 ° -121.326115 °	37.926322 ° -121.326115 °	28 Y
40	1.77	1.77	Earthen Levee	Trim / Thin Trees	LS	M	Trim and thin trees to allow visibility of the ground and room to flood fight.	37.925993 ° -121.325777 °	37.926152 ° -121.325927 °	46 Y
41	1.80	1.80	Earthen Levee	Encroachments	LS	M	Prunings	37.925752 ° -121.325592 °	37.925752 ° -121.325592 °	100 Y
42	1.90	1.95	Earthen Levee	Encroachments	LS	PO	Landscaping	37.924364 ° -121.324473 °	37.923805 ° -121.324238 °	78
43	2.17	2.18	Earthen Levee	Erosion / Bank Caving	WS	W	Note and monitor erosion site.	37.921383 ° -121.322043 °	37.921300 ° -121.321902 °	30

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River						Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

  

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
44	2.22	2.28	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site.	37.920992 ° -121.321373 °	37.920505 ° -121.320485 °	31
45	2.29	2.31	Earthen Levee	Vegetation	LS	U	Elderberries are blocking visibility and flood fight capability.	37.920372 ° -121.320230 °	37.920273 ° -121.320022 °	32 Y
46	2.34	2.35	Earthen Levee	Erosion / Bank Caving	WS	W	Note and monitor erosion site.	37.919885 ° -121.319713 °	37.919703 ° -121.319702 °	34
47	2.46	2.50	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site.	37.918628 ° -121.320817 °	37.918438 ° -121.321452 °	36
48	2.47	2.48	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	37.918575 ° -121.320980 °	37.918515 ° -121.321110 °	35
49	2.48	2.48	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.918480 ° -121.321114 °	37.918480 ° -121.321114 °	80
50	2.52	2.52	Earthen Levee	Vegetation	LS	U	Elderberries are blocking visibility and flood fight capability.	37.918345 ° -121.321765 °	37.918302 ° -121.321923 °	37 Y
51	2.53	2.53	Earthen Levee	Vegetation	WS	U	Elderberries are blocking visibility and flood fight capability.	37.918287 ° -121.321980 °	37.918287 ° -121.321980 °	38 Y
52	2.55	2.59	Earthen Levee	Slope Stability	LS	M	Repair slope instability.	37.918060 ° -121.322384 °	37.917667 ° -121.322713 °	82
53	2.56	2.56	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	37.918047 ° -121.322415 °	37.918047 ° -121.322415 °	40
54	2.59	2.59	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	37.917673 ° -121.322718 °	37.917673 ° -121.322718 °	41
55	2.59	2.59	Earthen Levee	Encroachments	WS	CO	Buildings	37.917673 ° -121.322718 °	37.917673 ° -121.322718 °	42 Y
56	2.60	2.60	Earthen Levee	Animal Control	LS	M	Repair the levee slope damaged by livestock and prevent large animal access.	37.917475 ° -121.322808 °	37.917475 ° -121.322808 °	917
57	2.61	2.65	Earthen Levee	Vegetation	LS	W	Remove the wild growth other than native grasses from the levee slopes.	37.917222 ° -121.322652 °	37.916903 ° -121.322167 °	9
58	2.66	2.66	Earthen Levee	Vegetation	LS	U	Elderberries are blocking visibility and flood fight capability.	37.916780 ° -121.322095 °	37.916780 ° -121.322095 °	43 Y
59	2.67	2.69	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.916718 ° -121.322020 °	37.916502 ° -121.321980 °	918
60	2.67	2.67	Earthen Levee	Encroachments	WS	CO	Ramp	37.916698 ° -121.322007 °	37.916698 ° -121.322007 °	920 Y
61	2.67	2.67	Earthen Levee	Erosion / Bank Caving	WS	M	Schedule repair of erosion site prior to the next inspection.	37.916650 ° -121.321987 °	37.916650 ° -121.321987 °	919

**\* Location**

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River						Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

  

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
62	2.71	2.80	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.916180 ° -121.322165 °	37.915142 ° -121.323018 °	44
63	2.73	2.81	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees over roadway to at least 12 feet above ground level.	37.915937 ° -121.322313 °	37.915078 ° -121.323232 °	264
64	2.73	2.73	Earthen Levee	Encroachments	LS	W	Tree or limb	37.915747 ° -121.322470 °	37.915747 ° -121.322470 °	60
65	2.77	2.77	Earthen Levee	Encroachments	LS	M	Tree or limb Inspector Comments: Broken tree branch.	37.915503 ° -121.322745 °	37.915503 ° -121.322745 °	70
66	2.81	2.81	Earthen Levee	Encroachments	WS	W	Prunings	37.915125 ° -121.323227 °	37.915125 ° -121.323227 °	921
67	2.82	2.82	Earthen Levee	Vegetation	LS	U	Elderberries are blocking visibility and flood fight capability.	37.915022 ° -121.323443 °	37.915022 ° -121.323443 °	48 Y
68	2.83	2.83	Earthen Levee	Trim / Thin Trees	LS	M	Thin trees to allow visibility of the ground and room to flood fight.	37.915063 ° -121.323585 °	37.915063 ° -121.323585 °	91
69	2.88	2.88	Earthen Levee	Vegetation	LS	M	Elderberries are blocking visibility and flood fight capability.	37.914427 ° -121.324198 °	37.914427 ° -121.324198 °	49
70	2.93	2.95	Earthen Levee	Encroachments	LS	M	Prunings	37.913767 ° -121.324427 °	37.913503 ° -121.324488 °	50 Y
71	2.96	2.96	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.913415 ° -121.324503 °	37.913415 ° -121.324503 °	51
72	2.98	2.98	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site. Inspector Comments: Erosion cause by rain runoff.	37.913010 ° -121.324497 °	37.913010 ° -121.324497 °	922 Y
73	3.04	3.04	Earthen Levee	Animal Control	LS	M	Repair the levee slope damaged by livestock and prevent large animal access.	37.912163 ° -121.324702 °	37.912163 ° -121.324702 °	924
74	3.10	3.12	Earthen Levee	Animal Control	LS	M	Exterminate rodents and backfill and compact or grout burrows.	37.911382 ° -121.324928 °	37.911088 ° -121.325113 °	925
75	3.23	3.31	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: Sloughing rip rap is visible on the site [2011 Site ID:RD0524U01RM43.83]	37.908544 ° -121.324894 °	37.908544 ° -121.324894 °	29 Y
76	3.33	3.35	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.908158 ° -121.325418 °	37.907872 ° -121.325443 °	926
77	3.37	3.40	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.907645 ° -121.325442 °	37.907157 ° -121.325408 °	52
78	3.38	3.39	Earthen Levee	Encroachments	LS	CO	Landscaping	37.907407 ° -121.325435 °	37.907177 ° -121.325392 °	92
79	3.39	3.45	Earthen Levee	Animal Control	WS	M	Exterminate rodents and backfill and compact or grout burrows.	37.907283 ° -121.325432 °	37.906503 ° -121.325002 °	53

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River						Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

  

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
80	3.43	3.49	Earthen Levee	Trim / Thin Trees	LS	U	Trim and thin trees to allow visibility of the ground and room to flood fight.	37.906747 ° -121.325248 °	37.906192 ° -121.324543 °	54 Y
81	3.45	3.45	Earthen Levee	Encroachments	LS	M	Material Inspector Comments: Broken concrete pipes	37.906540 ° -121.325015 °	37.906540 ° -121.325015 °	56 Y
82	3.47	3.47	Earthen Levee	Trim / Thin Trees	LS	U	Trim and thin trees to allow visibility of the ground and room to flood fight.	37.906265 ° -121.324643 °	37.906265 ° -121.324643 °	93 Y
83	3.53	3.53	Earthen Levee	Encroachments	LS	CO	Ramp Inspector Comments: Unauthorized ramp on landside slope.	37.905552 ° -121.323847 °	37.905552 ° -121.323847 °	265
84	3.54	3.64	Earthen Levee	Trim / Thin Trees	LS	M	Trim and thin trees to allow visibility of the ground and room to flood fight.	37.905638 ° -121.323892 °	37.904430 ° -121.324570 °	57
85	3.68	3.68	Earthen Levee	Slope Stability	WS	M	Repair the levee slope damaged by foot traffic and prevent access where possible. Inspector Comments: Landowner cut steps into waterside slope.	37.904113 ° -121.325080 °	37.904113 ° -121.325080 °	58 Y
86	3.80	3.80	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.902645 ° -121.326340 °	37.902645 ° -121.326340 °	927
87	3.82	3.82	Earthen Levee	Trim / Thin Trees	LS	W	Trim trees to at least five feet above ground level.	37.902417 ° -121.326482 °	37.902417 ° -121.326482 °	59
88	3.82	3.82	Earthen Levee	Encroachments	CR	M	Equipment Inspector Comments: Landowner installed temporary piping system without permit.	37.902365 ° -121.326453 °	37.902365 ° -121.326453 °	266 Y
89	3.84	3.85	Earthen Levee	Trim / Thin Trees	LS	W	Trim trees to at least five feet above ground level.	37.902155 ° -121.326523 °	37.902002 ° -121.326550 °	928
90	3.89	4.01	Earthen Levee	Encroachments	LS	M	Equipment	37.901375 ° -121.326507 °	37.899745 ° -121.326630 °	62 Y
91	3.92	3.92	Earthen Levee	Vegetation	WS	M	Remove the wild growth other than native grasses from the levee slopes. Inspector Comments: Remove cactus	37.900952 ° -121.326443 °	37.900952 ° -121.326443 °	94
92	3.93	3.93	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.900854 ° -121.326438 °	37.900854 ° -121.326438 °	83
93	4.06	4.06	Earthen Levee	Encroachments	LS	CO	Ramp Inspector Comments: Unauthorized ramp. Ramp does not meet Title 23 standard.	37.899027 ° -121.326982 °	37.899027 ° -121.326982 °	101 Y
94	4.07	4.07	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.898925 ° -121.327015 °	37.898925 ° -121.327015 °	61
95	4.08	4.13	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.898832 ° -121.327092 °	37.898090 ° -121.327457 °	64

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River							Left	6.26	10/26/2011 10/26/2011	Richard Willoughby
LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
96	4.40	4.56	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.894587 ° -121.329253 °	37.892493 ° -121.328267 °	65
97	4.57	4.57	Earthen Levee	Trim / Thin Trees	WS	N	Tree stumps. Inspector Comments: Remove dead tree	37.892368 ° -121.328200 °	37.892368 ° -121.328200 °	102
98	4.58	4.58	Earthen Levee	Encroachments	LS	C	Tree or limb Inspector Comments: Downed tree on landside toe.	37.892222 ° -121.328182 °	37.892222 ° -121.328182 °	103
99	4.64	4.64	Earthen Levee	Encroachments	LS	M	Garbage	37.891365 ° -121.328633 °	37.891365 ° -121.328633 °	66 Y
100	4.64	4.68	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.891337 ° -121.328685 °	37.890953 ° -121.328993 °	63
101	4.71	4.71	Supplemental	DWR Erosion Survey	WS	U	Inspector Comments: 08/23/2011: Cracking erosion along the levee bank. Erosion appears to be caused by river flows. [2011 Site ID:RD0524U01RM45.27]	37.889809 ° -121.329342 °	37.889809 ° -121.329342 °	47 Y
102	4.74	4.74	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.890108 ° -121.329523 °	37.890108 ° -121.329523 °	67
103	4.95	4.95	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level. Inspector Comments: Down tree laying on landside toe.	37.887578 ° -121.331237 °	37.887578 ° -121.331237 °	95
104	4.98	4.98	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.887277 ° -121.331609 °	37.887277 ° -121.331609 °	84
105	5.11	5.11	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.885400 ° -121.332153 °	37.885400 ° -121.332153 °	68
106	5.17	5.17	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.884592 ° -121.332168 °	37.884592 ° -121.332168 °	71
107	5.20	5.20	Earthen Levee	Trim / Thin Trees	LS	M	Trim and thin trees to allow visibility of the ground and room to flood fight.	37.884075 ° -121.332118 °	37.884075 ° -121.332118 °	72
108	5.32	5.38	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.882377 ° -121.332598 °	37.881498 ° -121.332800 °	85
109	5.43	5.46	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.880945 ° -121.332837 °	37.880522 ° -121.332918 °	932
110	5.46	5.46	Earthen Levee	Animal Control	LS	M	Exterminate rodents and backfill and compact or grout burrows.	37.880575 ° -121.332890 °	37.880575 ° -121.332890 °	931
111	5.48	5.48	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.880085 ° -121.333045 °	37.880085 ° -121.333045 °	73
112	5.57	5.57	Earthen Levee	Trim / Thin Trees	WS	M	Trim trees to at least five feet above ground level.	37.878918 ° -121.333148 °	37.878918 ° -121.333148 °	96

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

LMR No.	Levee Mile		Category	Item	Location *	Rating **	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
113	5.65	5.66	Supplemental	DWR Erosion Survey	WS	M	Inspector Comments: 08/23/2011: No significant changes observed on site.09/07/2010: No significant changes observed on site. Erosion site is located beneath Howard Road Bridge. Majority of the existing rip rap has slipped, dragging away levee materials and exposing the underlying soft soil.08/06/2010: Recommend for annual assessment and monitoring during flood events, per CLRO.09/30/2009: No major changes observed since the last visit; upper portion of existing revetment has slipped, exposing the degrading bank; note that site # is the same as RM46.30, LM5.69 found in the CLRO CES Evaluation 2008 Report; site was previously rated "M".11/04/2008: Previously repaired using rock revetment; upper portion of th revetment is sliding, causing deformation on the levee slope; site is upstream of Howards Road Bridge. [2011 Site ID:RD0524U01RM46.12]	37.877880 ° -121.332550 °	37.877880 ° -121.332550 °	55 Y
114	5.84	5.84	Earthen Levee	Encroachments	LS	M	Prunings Inspector Comments: Prunings at landside toe should be burned or removed.	37.875328 ° -121.333050 °	37.875328 ° -121.333050 °	267
115	5.86	5.86	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.875073 ° -121.333168 °	37.875073 ° -121.333168 °	69
116	5.92	5.94	Earthen Levee	Animal Control	WS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	37.874240 ° -121.333187 °	37.874002 ° -121.333027 °	75
117	5.92	5.92	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site.	37.874240 ° -121.333185 °	37.874165 ° -121.333155 °	74 Y
118	5.97	5.97	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.873678 ° -121.332550 °	37.873678 ° -121.332550 °	86
119	5.99	6.00	Earthen Levee	Encroachments	LS	PO	Fences	37.873545 ° -121.332308 °	37.873445 ° -121.332127 °	87
120	5.99	6.00	Earthen Levee	Encroachments	LS	CO	Landscaping Inspector Comments: Cactus	37.873543 ° -121.332308 °	37.873445 ° -121.332127 °	88 Y
121	6.01	6.05	Earthen Levee	Encroachments	LS	CO	Buildings	37.873377 ° -121.331977 °	37.873102 ° -121.331382 °	89 Y
122	6.02	6.02	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.873300 ° -121.331928 °	37.873300 ° -121.331928 °	81
123	6.05	6.05	Earthen Levee	Erosion / Bank Caving	WS	M	Schedule repair of erosion site prior to the next inspection.	37.873047 ° -121.331408 °	37.873047 ° -121.331408 °	933

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River						Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

  

LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
124	6.21	6.21	Earthen Levee	Encroachments	WS	M	Pipe Inspector Comments: Open abandoned 10" pipe on waterside slope below flood elevation. Pipe should be removed or properly abandoned.	37.871137 ° -121.330138 °	37.871137 ° -121.330138 °	268 Y
125	6.23	6.23	Earthen Levee	Trim / Thin Trees	LS	M	Trim trees to at least five feet above ground level.	37.870842 ° -121.330000 °	37.870842 ° -121.330000 °	98
126	6.23	6.23	Earthen Levee	Vegetation	LS	M	Remove the wild growth other than native grasses from the levee slopes.	37.870840 ° -121.329993 °	37.870840 ° -121.329993 °	97

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	1
Start Levee Mile	0.22
End Levee Mile	0.22
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting

Looking east at 3" depression on levee crown near waterward shoulder.

richard\_f\_20111028\_360.jpg



Levee Mile Report Line	2
Start Levee Mile	0.36
End Levee Mile	0.36
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Garbage pile at landward toe at LM 0.36

richard\_f\_20111014\_468.jpg



Levee Mile Report Line	3
Start Levee Mile	0.38
End Levee Mile	0.39
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Minor erosion from LM 0.38 to 0.39

richard\_f\_20111014\_451.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	4
Start Levee Mile	0.48
End Levee Mile	0.49
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Major erosion from LM 0.48 to 0.49

richard\_f\_20111014\_452.jpg



Levee Mile Report Line	4
Start Levee Mile	0.48
End Levee Mile	0.49
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Update of erosion site at LM 0.48 to 0.49

richard\_f\_20111014\_453.jpg



Levee Mile Report Line	4
Start Levee Mile	0.48
End Levee Mile	0.49
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southeast at erosion (no change as 4/2010)

richard\_f\_20111014\_454.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	4
Start Levee Mile	0.48
End Levee Mile	0.49
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking at erosion from the top of the levee (no change as of 4/2010)

richard\_f\_20111014\_455.jpg



Levee Mile Report Line	5
Start Levee Mile	0.51
End Levee Mile	0.52
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Erosion from LM 0.51 to 0.52

richard\_f\_20111014\_456.jpg



Levee Mile Report Line	5
Start Levee Mile	0.51
End Levee Mile	0.52
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Update of erosion site at LM 0.51 to 0.52

richard\_f\_20111014\_457.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	5
Start Levee Mile	0.51
End Levee Mile	0.52
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southeast at erosion on waterside slope, no change as of 4/2010

richard\_f\_20111014\_458.jpg



Levee Mile Report Line	5
Start Levee Mile	0.51
End Levee Mile	0.52
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking at erosion from the top of the levee. No change as of 4/2010

richard\_f\_20111014\_459.jpg



Levee Mile Report Line	6
Start Levee Mile	0.53
End Levee Mile	0.60
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Upstream view of the site. Broken concrete used as revetment is sliding, dragging down levee materials.

SJR2011\_RD0524U01RM41.15\_1.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	6
Start Levee Mile	0.53
End Levee Mile	0.60
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Direct view of the site.

SJR2011\_RD0524U01RM41.15\_2.jpg



Levee Mile Report Line	6
Start Levee Mile	0.53
End Levee Mile	0.60
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Upstream view. Sloughing mid-slope possibly caused by sliding of the revetment.

SJR2011\_RD0524U01RM41.15\_3.jpg



Levee Mile Report Line	6
Start Levee Mile	0.53
End Levee Mile	0.60
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Direct view of the site showing emergent vegetation growing at the midslope.

SJR2011\_RD0524U01RM41.15\_4.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	8
Start Levee Mile	0.63
End Levee Mile	0.64
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking north at bamboo on waterside slope.

richard\_f\_20111014\_460.jpg



Levee Mile Report Line	8
Start Levee Mile	0.63
End Levee Mile	0.64
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking north at bamboo on waterside slope as of 4/2010 no change.

richard\_f\_20111014\_461.jpg



Levee Mile Report Line	9
Start Levee Mile	0.64
End Levee Mile	0.64
Location	Crown
Category	Earthen Levee
Item	Crown Surface / Depressions / Rutting

Large hole 3 x 3 on levee crown near waterside shoulder at LM 0.64

richard\_f\_20111014\_462.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	10
Start Levee Mile	0.65
End Levee Mile	0.66
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Erosion from LM 0.65 to 0.66

richard\_f\_20111014\_463.jpg



Levee Mile Report Line	10
Start Levee Mile	0.65
End Levee Mile	0.66
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Update of erosion site at LM 0.65 to 0.66

richard\_f\_20111014\_464.jpg



Levee Mile Report Line	10
Start Levee Mile	0.65
End Levee Mile	0.66
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Looking south at erosion on waterside shoulder.

richard\_f\_20111014\_465.jpg



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U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment

C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	11
Start Levee Mile	0.68
End Levee Mile	0.68
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Bamboo on waterward slope at LM 0.68

richard\_f\_20111014\_466.jpg



Levee Mile Report Line	11
Start Levee Mile	0.68
End Levee Mile	0.68
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at bamboo on waterside shoulder as of 4/2010.

richard\_f\_20111014\_467.jpg



Levee Mile Report Line	12
Start Levee Mile	0.77
End Levee Mile	0.78
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Upstream view of the erosion site. Note the railroad bridge.

SJR2011\_RD0524U01RM41.39\_1.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	12
Start Levee Mile	0.77
End Levee Mile	0.78
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion site. Vegetation visible

SJR2011\_RD0524U01RM41.39\_2.jpg



Levee Mile Report Line	12
Start Levee Mile	0.77
End Levee Mile	0.78
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of erosion

SJR2011\_RD0524U01RM41.39\_3.jpg



Levee Mile Report Line	13
Start Levee Mile	0.78
End Levee Mile	0.78
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking west at dense vegetation on landside toe.

richard\_f\_20111028\_362.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	14
Start Levee Mile	0.79
End Levee Mile	0.79
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking southwest at low hanging tree branches at landside toe.

richard\_f\_20111028\_361.jpg



Levee Mile Report Line	16
Start Levee Mile	0.91
End Levee Mile	0.91
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion. Not the riprap protection near the site

SJR2011\_RD0524U01RM41.5\_1.jpg



Levee Mile Report Line	16
Start Levee Mile	0.91
End Levee Mile	0.91
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

A close view of the erosion

SJR2011\_RD0524U01RM41.5\_2.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
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PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	16
Start Levee Mile	0.91
End Levee Mile	0.91
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the upstream riprap protection.

SJR2011\_RD0524U01RM41.5\_3.jpg



Levee Mile Report Line	17
Start Levee Mile	0.94
End Levee Mile	1.02
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking south at low hanging tree branches at landside toe.

richard\_f\_20111028\_363.jpg



Levee Mile Report Line	18
Start Levee Mile	1.00
End Levee Mile	1.01
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Close view of the erosion. Note that the riprap protection next to the erosion.

SJR2011\_RD0524U01RM41.59\_1.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	18
Start Levee Mile	1.00
End Levee Mile	1.01
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Close view of the erosion. The protection has been washed away.

SJR2011\_RD0524U01RM41.59\_2.jpg



Levee Mile Report Line	18
Start Levee Mile	1.00
End Levee Mile	1.01
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion

SJR2011\_RD0524U01RM41.59\_3.jpg



Levee Mile Report Line	18
Start Levee Mile	1.00
End Levee Mile	1.01
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion

SJR2011\_RD0524U01RM41.59\_4.jpg



<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	19
Start Levee Mile	1.03
End Levee Mile	1.03
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking upstream (south) at erosion site.

richard\_f\_20111014\_469.jpg



Levee Mile Report Line	20
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Landward slope damage at LM 1.09

richard\_f\_20111014\_470.jpg



Levee Mile Report Line	20
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Updated picture of erosion site on landside shoulder.

richard\_f\_20111014\_471.jpg



<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	20
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Update of above slope stability.

richard\_f\_20111014\_472.jpg



Levee Mile Report Line	20
Start Levee Mile	1.09
End Levee Mile	1.09
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

Looking at updated slope stability as 4/2010

richard\_f\_20111014\_473.jpg



Levee Mile Report Line	21
Start Levee Mile	1.14
End Levee Mile	1.17
Location	Water Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking northwest at low hanging tree branches at waterside toe.

richard\_f\_20111028\_364.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	22
Start Levee Mile	1.16
End Levee Mile	1.24
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Downstream view of the site where sloughing is occurring.

SJR2011\_RD0524U01RM41.79\_1.jpg



Levee Mile Report Line	22
Start Levee Mile	1.16
End Levee Mile	1.24
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Upstream view of the site.

SJR2011\_RD0524U01RM41.79\_2.jpg



Levee Mile Report Line	22
Start Levee Mile	1.16
End Levee Mile	1.24
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Direct view of the site.

SJR2011\_RD0524U01RM41.79\_3.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
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PO : Partially Obstructing  
CO : Completely Obstructing  
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N : Not Inspected, see Inspector Comment    C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	22
Start Levee Mile	1.16
End Levee Mile	1.24
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Direct view of the site.

SJR2011\_RD0524U01RM41.79\_4.jpg



Levee Mile Report Line	23
Start Levee Mile	1.17
End Levee Mile	1.25
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at dense veg. on landside toe.

richard\_f\_20111014\_516.jpg



Levee Mile Report Line	25
Start Levee Mile	1.26
End Levee Mile	1.26
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking south at unauthorized ramp on landside slope.

richard\_f\_20111028\_365.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
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W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	25
Start Levee Mile	1.26
End Levee Mile	1.26
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking northwest at unauthorized ramp on landside slope.

richard\_f\_20111028\_366.jpg



Levee Mile Report Line	26
Start Levee Mile	1.31
End Levee Mile	1.31
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking north at broken pipe.

richard\_f\_20111014\_486.jpg



Levee Mile Report Line	26
Start Levee Mile	1.31
End Levee Mile	1.31
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking west at pipe on landside slope.

richard\_f\_20111014\_487.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
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U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
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N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	27
Start Levee Mile	1.32
End Levee Mile	1.33
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Erosion from LM 1.32 to 1.33

richard\_f\_20111014\_476.jpg



Levee Mile Report Line	27
Start Levee Mile	1.32
End Levee Mile	1.33
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking at erosion from top of levee

richard\_f\_20111014\_477.jpg



Levee Mile Report Line	27
Start Levee Mile	1.32
End Levee Mile	1.33
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking at update of erosion site at LM 1.32 to 1.33

richard\_f\_20111014\_478.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
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U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	29
Start Levee Mile	1.51
End Levee Mile	1.51
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Dense vegetation on landside toe.

richard\_f\_20111014\_517.jpg



Levee Mile Report Line	29
Start Levee Mile	1.51
End Levee Mile	1.51
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking south at dense veg. on landside slope and toe.

richard\_f\_20111014\_518.jpg



Levee Mile Report Line	30
Start Levee Mile	1.56
End Levee Mile	1.74
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Overgrown landscaping on landward slope from LM 1.56 to 1.74

richard\_f\_20111014\_479.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
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PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment

C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	31
Start Levee Mile	1.58
End Levee Mile	1.64
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the site where undermining has occurred.

SJR2011\_RD0524U01RM42.2\_1.jpg



Levee Mile Report Line	31
Start Levee Mile	1.58
End Levee Mile	1.64
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Large trees along the levee toe. There is minimal slope protection. The erosion near tree visible.

SJR2011\_RD0524U01RM42.2\_2.jpg



Levee Mile Report Line	32
Start Levee Mile	1.62
End Levee Mile	1.63
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking north at dense veg on landside and waterside slopes.

richard\_f\_20111014\_480.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

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PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	33
Start Levee Mile	1.62
End Levee Mile	1.63
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking southeast at dense veg. on waterside slope.

richard\_f\_20111014\_481.jpg



Levee Mile Report Line	35
Start Levee Mile	1.64
End Levee Mile	1.64
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking east at non-permitted boat dock.

richard\_f\_20111014\_493.jpg



Levee Mile Report Line	35
Start Levee Mile	1.64
End Levee Mile	1.64
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking at garbage on waterside slope.

richard\_f\_20111014\_494.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
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U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment    C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	37
Start Levee Mile	1.69
End Levee Mile	1.69
Location	Water Side
Category	Earthen Levee
Item	Encroachments
Looking northeast on non-permitted concrete stairs on waterside slope.	
richard_f_20111014_497.jpg	



Levee Mile Report Line	37
Start Levee Mile	1.69
End Levee Mile	1.69
Location	Water Side
Category	Earthen Levee
Item	Encroachments
Looking west at concrete stairs on waterside slope.	
richard_f_20111014_498.jpg	



Levee Mile Report Line	37
Start Levee Mile	1.69
End Levee Mile	1.69
Location	Water Side
Category	Earthen Levee
Item	Encroachments
Looking southwest at retaining wall connect to concrete stairs.	
richard_f_20111014_499.jpg	

**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	39
Start Levee Mile	1.75
End Levee Mile	1.75
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Garbage on landward toe from LM 1.75 to 1.76

richard\_f\_20111014\_482.jpg



Levee Mile Report Line	39
Start Levee Mile	1.75
End Levee Mile	1.75
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking at updated trash pile on landside slope and toe.

richard\_f\_20111014\_483.jpg



Levee Mile Report Line	39
Start Levee Mile	1.75
End Levee Mile	1.75
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking west at prunings on landside toe.

richard\_f\_20111014\_484.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
M : Minimally Acceptable  
U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment

C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	40
Start Levee Mile	1.77
End Levee Mile	1.77
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking southwest at dense vegetation and low hanging tree branches on landside slope and toe.

richard\_f\_20111028\_367.jpg



Levee Mile Report Line	41
Start Levee Mile	1.80
End Levee Mile	1.80
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at prunings on landside toe.

richard\_f\_20111028\_368.jpg



Levee Mile Report Line	45
Start Levee Mile	2.29
End Levee Mile	2.31
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at dense veg on landside slope and toe.

richard\_f\_20111014\_485.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
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PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment    C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	50
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at elderberry on landside slope.

richard\_f\_20111014\_488.jpg



Levee Mile Report Line	50
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at trees along levee landside toe.

richard\_f\_20111014\_489.jpg



Levee Mile Report Line	50
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking north at elderberry and trees on landside slope.

richard\_f\_20111014\_490.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
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U : Unacceptable

PO : Partially Obstructing  
CO : Completely Obstructing  
W : Watch/Monitor

N : Not Inspected, see Inspector Comment

C : Corrected



**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	50
Start Levee Mile	2.52
End Levee Mile	2.52
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at dense vegetation on landside toe.

richard\_f\_20111028\_369.jpg



Levee Mile Report Line	51
Start Levee Mile	2.53
End Levee Mile	2.53
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking south at elderberry on waterside slope.

richard\_f\_20111014\_491.jpg



Levee Mile Report Line	51
Start Levee Mile	2.53
End Levee Mile	2.53
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Looking north at elderberry on waterside slope.

richard\_f\_20111014\_492.jpg



**\* Location**

LS : Land Side  
WS : Water Side  
CR : Crown

**\*\* Rating**

A : Acceptable  
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PO : Partially Obstructing  
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N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	55
Start Levee Mile	2.59
End Levee Mile	2.59
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking at animal pens on landside slope and toe.

richard\_f\_20111014\_495.jpg



Levee Mile Report Line	58
Start Levee Mile	2.66
End Levee Mile	2.66
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking southwest at structures on landside.

richard\_f\_20111014\_496.jpg



Levee Mile Report Line	60
Start Levee Mile	2.67
End Levee Mile	2.67
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at unauthorized ramp on waterside slope.

richard\_f\_20111028\_370.jpg



<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	67
Start Levee Mile	2.82
End Levee Mile	2.82
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Looking south at elderberry on landside slope.

richard\_f\_20111014\_500.jpg



Levee Mile Report Line	70
Start Levee Mile	2.93
End Levee Mile	2.95
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at prunings on landside slope.

richard\_f\_20111014\_501.jpg



Levee Mile Report Line	72
Start Levee Mile	2.98
End Levee Mile	2.98
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking east at erosion on waterside toe.

richard\_f\_20111014\_519.jpg



<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	75
Start Levee Mile	3.23
End Levee Mile	3.31
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Direct view of the site.

SJR2011\_RD0524U01RM43.83\_1.jpg



Levee Mile Report Line	75
Start Levee Mile	3.23
End Levee Mile	3.31
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

A closer view of the erosion

SJR2011\_RD0524U01RM43.83\_2.jpg



Levee Mile Report Line	75
Start Levee Mile	3.23
End Levee Mile	3.31
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Closer view of the erosion

SJR2011\_RD0524U01RM43.83\_3.jpg



<b>* Location</b> LS : Land Side WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	75
Start Levee Mile	3.23
End Levee Mile	3.31
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion

SJR2011\_RD0524U01RM43.83\_4.jpg



Levee Mile Report Line	80
Start Levee Mile	3.43
End Levee Mile	3.49
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking northwest at dense vegetation on landside slope.

richard\_f\_20111028\_371.jpg



Levee Mile Report Line	81
Start Levee Mile	3.45
End Levee Mile	3.45
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southwest at concrete pipes on landside toe.

richard\_f\_20111028\_372.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	82
Start Levee Mile	3.47
End Levee Mile	3.47
Location	Land Side
Category	Earthen Levee
Item	Trim / Thin Trees

Looking northwest at low hanging tree branches on landside slope and toe.

richard\_f\_20111028\_373.jpg



Levee Mile Report Line	85
Start Levee Mile	3.68
End Levee Mile	3.68
Location	Water Side
Category	Earthen Levee
Item	Slope Stability

Looking southeast steps cut into waterside slope.

richard\_f\_20111028\_374.jpg



Levee Mile Report Line	88
Start Levee Mile	3.82
End Levee Mile	3.82
Location	Crown
Category	Earthen Levee
Item	Encroachments

Looking south at unauthorized irrigation pipe across levee and water filtration system at landside toe.

richard\_f\_20111028\_375.jpg



**\* Location**

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CR : Crown

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	88
Start Levee Mile	3.82
End Levee Mile	3.82
Location	Crown
Category	Earthen Levee
Item	Encroachments

Looking west at water filtration system on landside toe.

richard\_f\_20111028\_376.jpg



Levee Mile Report Line	88
Start Levee Mile	3.82
End Levee Mile	3.82
Location	Crown
Category	Earthen Levee
Item	Encroachments

Looking south unauthorized pvc irrigation pipe across the levee crown.

richard\_f\_20111028\_377.jpg



Levee Mile Report Line	90
Start Levee Mile	3.89
End Levee Mile	4.01
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking upstream at equipment on landside shoulder

richard\_f\_20111014\_502.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	93
Start Levee Mile	4.06
End Levee Mile	4.06
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking west at unauthorized ramp on landside slope.

richard\_f\_20111028\_378.jpg



Levee Mile Report Line	99
Start Levee Mile	4.64
End Levee Mile	4.64
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Garbage at landward toe next to ramp at LM 4.64

richard\_f\_20111014\_503.jpg



Levee Mile Report Line	101
Start Levee Mile	4.71
End Levee Mile	4.71
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion site

SJR2011\_RD0524U01RM45.27\_1.jpg



**\* Location**

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CR : Crown

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	101
Start Levee Mile	4.71
End Levee Mile	4.71
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the erosion. Note the notches caused by the cracking

SJR2011\_RD0524U01RM45.27\_2.jpg



Levee Mile Report Line	101
Start Levee Mile	4.71
End Levee Mile	4.71
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Front view of the site.

SJR2011\_RD0524U01RM45.27\_3.jpg



Levee Mile Report Line	113
Start Levee Mile	5.65
End Levee Mile	5.66
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Sloughing rip rap just below the Howard Bridge abutment.

SJR2011\_RD0524U01RM46.12\_1.jpg



**\* Location**

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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	113
Start Levee Mile	5.65
End Levee Mile	5.66
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Sloughing rip rap adjacent to Howard Bridge.

SJR2011\_RD0524U01RM46.12\_2.jpg



Levee Mile Report Line	113
Start Levee Mile	5.65
End Levee Mile	5.66
Location	Water Side
Category	Supplemental
Item	DWR Erosion Survey

Upstream view of sloughing rip rap.

SJR2011\_RD0524U01RM46.12\_3.jpg



Levee Mile Report Line	117
Start Levee Mile	5.92
End Levee Mile	5.92
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Erosion at waterward toe and around irrigation pipe at LM 5.92

richard\_f\_20111014\_504.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	117
Start Levee Mile	5.92
End Levee Mile	5.92
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

Looking southeast at erosion around pipe.

richard\_f\_20111014\_505.jpg



Levee Mile Report Line	120
Start Levee Mile	5.99
End Levee Mile	6.00
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at fence and cactus on landside slope and toe.

richard\_f\_20111014\_510.jpg



Levee Mile Report Line	121
Start Levee Mile	6.01
End Levee Mile	6.05
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Looking downstream at building on landside toe.

richard\_f\_20111014\_511.jpg



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**Flood Control Project Maintenance  
Levee Inspections**

**Levee Inspection Report By Mile - Fall 2011**

**Reclamation District No. 0524 Middle Roberts Island**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.26	10/26/2011 10/26/2011	Richard Willoughby

Levee Mile Report Line	124
Start Levee Mile	6.21
End Levee Mile	6.21
Location	Water Side
Category	Earthen Levee
Item	Encroachments

Looking southeast at abandoned pipe on waterside slope.

richard\_f\_20111028\_379.jpg



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